



# **Intel<sup>®</sup> Server Board S3000PT**

## ***Tested Hardware and Operating System List***

**Revision 1.3**

**April 2007**

**Enterprise Platforms and Services Marketing**

---

## *Revision History*

Date	Revision Number	Modifications
September 2006	1.0	Initial release.
January 2007	1.1	Updated with Q4 sustaining run.
March 2007	1.2	Updated supported OS table.
April 2007	1.3	Updated with Q1 sustaining run.

## *Disclaimers*

THE INFORMATION IN THIS DOCUMENT IS PROVIDED "AS IS" WITH NO WARRANTIES WHATSOEVER, INCLUDING ANY WARRANTY OF MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSE, OR ANY WARRANTY OTHERWISE ARISING OUT OF ANY PROPOSAL, SPECIFICATION, OR SAMPLE.

Information in this document is provided in connection with Intel® products. No license, express or implied, by estoppel or otherwise, to any intellectual property rights is granted by this document. Except as provided in Intel's Terms and Conditions of Sale for such products, Intel assumes no liability whatsoever, and Intel disclaims any express or implied warranty, relating to sale and/or use of Intel products including liability or warranties relating to fitness for a particular purpose, merchantability, or infringement of any patent, copyright or other intellectual property right. Intel products are not intended for use in medical, life saving, or life sustaining applications.

Intel retains the right to make changes to its test specifications at any time, without notice.

The hardware vendor remains solely responsible for the design, sale and functionality of its product, including any liability arising from product infringement or product warranty.

Copyright © Intel Corporation 2005-2007. All rights reserved.

Intel, the Intel logo, and EtherExpress are trademarks or registered trademarks of Intel Corporation or its subsidiaries in the United States and other countries.

\*Other names or brands may be claimed as the property of others.

# Table of Contents

<b>1. Introduction .....</b>	<b>1</b>
1.1 Test Overview .....	1
1.1.1 Basic Installation Testing .....	1
1.1.2 Peripheral Compatibility and Stress Testing .....	2
1.2 Pass/Fail Test Criteria .....	3
<b>2. Base System Definitions .....</b>	<b>4</b>
<b>3. Supported Operating Systems.....</b>	<b>5</b>
3.1 Operating System Certifications .....	6
<b>4. Peripherals.....</b>	<b>7</b>
4.1 Input Devices .....	8
4.2 Modems .....	8
4.3 CD/DVD-RW Drives.....	8
4.4 Removable Drives .....	9
4.5 PCIe NIC adapter .....	9
4.6 Infiniband Adapter.....	10
4.7 SARS/SATA Adapter .....	10
4.8 Video Adapter .....	11
<b>5. Hard Disk Drives.....</b>	<b>12</b>

<This page left intentionally blank.>

# 1. Introduction

---

This document is intended to provide users of the Intel® Server Board S3000PT with a list of the operating systems and peripherals tested by Intel on this server platform.

This document will continue to be updated as new peripherals and operating systems are tested or until the Intel® Server Board S3000PT is no longer in production. Each new release of the document will present updated information as well as continue to provide the information from previous releases.

The peripherals specified in this document may or may not have been tested on all available board/riser combinations that make up the Intel® Server Board S3000PT product family. Intel will provide support for the peripherals listed when used within this family of products.

The Intel® Server Board S3000PT product family consists of the following server building blocks and integrated systems:

<b><i>Product Code</i></b>	<b><i>Product Description</i></b>
S3000PTH	Intel® Server Board S3000PT - Horizontal Power Connector, Channel 4-pack
BPTHBB	OEM 10-pack Intel® Server Board S3000PT - Horizontal Power Connector
BPTVBB	OEM 10-pack Intel® Server Board S3000PT - Vertical Power Connector

## 1.1 Test Overview

Testing performed on the Intel® Server Board S3000PT is divided into two separate categories:

- Basic Installation Testing
- Peripheral Compatibility and Stress Testing

### 1.1.1 Basic Installation Testing

Basic Installation Testing is performed with each supported operating system. Basic Installation Testing validates that the server board can install the operating system and that the base hardware feature set is functional. A small set of peripherals is used for installation purposes only. Testing includes network connectivity and running of proprietary and industry standard test suites.



The latest version of an operating system signifies the latest supported version at the time of the actual test run. Each new release of this document may have a newly supported release of a given operating system. Previous releases of a supported operating system may not be tested beyond the basic installation test process.

### 1.1.1.1 Support Commitment for Basic Installation Testing

Intel commits to provide the following level of customer support for operating systems that receive only basic installation testing:

- Intel will provide and test operating system drivers for each of the server board's integrated controllers, provided that the controller vendor has a driver available upon request. Vendors will not be required by Intel to develop drivers for operating systems that they do not already support. This may limit the functionality of certain server board integrated controllers.
- Intel will support customer issues that involve installation and/or functionality of an operating system with the server board's integrated controllers only if a driver has been made available.
- Intel will NOT provide support for issues related to use of any peripherals installed in the server system when an operating system that received basic installation testing only is in use.
- Support is defined as assistance in root causing issues, and determining a customer acceptable resolution to the issue associated with the operating system. The resolution may include, but is not limited to, on-board controller driver changes, engaging the vendor for resolution, BIOS changes, firmware changes, or determining a customer acceptable workaround for the issue.

### 1.1.2 Peripheral Compatibility and Stress Testing

Peripheral Compatibility and Stress Testing is performed only on the most current release of a supported operating system at the time of a given validation run. The Peripheral Compatibility and Stress Testing process consists of two areas: Base Platform and Stress Testing.

**Base Platform:** Each base platform will successfully install a given operating system, successfully run a disk stress test, and successfully run a network stress test.

**Stress Testing:** This test sequence uses configurations for a minimum 48-hour test run without injecting errors. Each configuration passes an installation test, a Network/Disk Stress test, and a tape backup test. Any fatal errors that occur will require a complete test restart.

#### 1.1.2.1 Support Commitment for Peripheral Compatibility and Stress Testing

Intel commits to provide the following level of customer support for operating systems that receive Peripheral Compatibility and Stress testing:

- Intel will provide support for customer issues with those operating systems involving installation and/or functionality of the server board with or without the peripherals listed in this document as having been tested under the particular operating system.
- Support is defined as assistance in root causing issues, and determining a customer acceptable resolution to the issue associated with the operating system. The resolution may include, but is not limited to, on-board controller driver changes, engaging the vendor for resolution, BIOS changes, firmware changes, or determining a customer acceptable workaround for the issue.
- Intel will provide and test operating system drivers for each onboard video, network, and storage controller.

- Intel will go through some of the steps to achieve certification to ensure its customers do not run across any problems, but the actual certification is the responsibility of the individual customer.



There is no support commitment for operating systems, adapter cards, and peripherals not listed in this document. Intel will consider support requests on a case-by-case basis.

## 1.2 Pass/Fail Test Criteria

For each operating system and peripheral configuration, a test passes if specific criteria are met. Specific configurations may have had particular characteristics that were addressed on a case-by-case basis. In general, a configuration passes testing if the following conditions are met:

- The operating system installed without error.
  - Manufacturer's installation instructions or Intel's best-known methods were used for the operating system installation.
  - No extraordinary workarounds were required during the operating system installation.
  - The server system behaved as expected during and after the operating system installation.
  - Application software installed and executed normally.
- Hardware compatibility tests ran to completion without error.
- Test software suites executed successfully.
  - Test and data files were created in the correct directories without error.
  - Files copied from client to server and back compare to the original with zero errors reported.
  - Clients remain connected to the server system.
  - Industry standard test suites run to completion with zero errors reported.

## 2. Base System Definitions

---

The following table lists the base system configurations tested for a given validation test run. Each specific product/system software combination tested is assigned a Base System Identifier Number. These numbers are used in the lists of peripherals referenced in the following sections. Support for the listed peripherals is only provided for the base systems and operating systems on which they were tested.

The peripherals specified in this document may or may not have been tested on all available board/riser combinations that make up the Intel® Server Board S3000PT product family. However, Intel will provide support for the peripherals listed when used within this family of products.

The following table is updated when a new test run is performed and a new product/system software combination is used.



Intel will only provide support for peripherals under the specified base system configuration and operating system versions with which they were tested.

Base System Configuration Identifier #	Product Family	BIOS Revision
1	Intel® Server Board S3000PT	X28
2	Intel® Server Board S3000PT	X37
3	Intel® Server Board S3000PT	X39



### 3. Supported Operating Systems

---

The following table provides a list of supported operating systems for the Intel® Server Board S3000PT. Each of the listed operating systems was tested for compatibility with the Intel® Server Board S3000PT base system configuration listed in Section 2 of this document. Operating systems are supported only with the specified base system configuration(s) with which they were tested.

The following table also indicates whether each operating system received Basic Installation Testing, or Peripheral Compatibility and Stress Testing. For information on the support commitments for Basic Installation Testing versus Peripheral Compatibility and Stress Testing, please reference Section 1 of this document.

Any variations to the standard operating system installation process are documented in the Installation Guidelines section of this document. If there are no installation guidelines noted in the following table, then the operating system installed as expected using manufacturer's installation instructions or Intel's best-known methods.



Operating systems supported by Intel® Server Management software or LANDesk\* Client Manager software may be different from the operating systems supported by the Intel® Server Board S3000PT. Please reference the *Readme* file and *User Guide* documents that are included as part of each Intel® Server Management and LANDesk\* Client Manager distribution for operating systems that are supported by that release.

Operating System	Base System Configuration Tested and Type of Testing	Notes
Microsoft Windows 2003* Server Enterprise Edition, SP1	Configuration 1, 2, 3. Full stress tests, CV tests, function tests and certification	
Microsoft Windows Server 2003* Enterprise Edition, SP1 EM64T	Configuration 1, 2, 3. Full stress tests, CV tests, function tests and certification	
Red Hat* Enterprise Linux Advanced Server, Version 4, Update 3, EM64T	Configuration 1. Full stress tests, CV tests, function tests and certification	
Red Hat* Enterprise Linux Advanced Server, Version 4, Update 4, EM64T	Configuration 1, 2, 3. Full stress tests, CV tests, function tests and certification	
SuSE* Linux Enterprise Server 9, SP3 EM64T	Configuration 1, 2. Basic operating system installation	
SuSE* Linux Enterprise Server 10, EM64T	Configuration 1, 2, 3. Basic operating system installation	

### 3.1 Operating System Certifications

Listed below are the operating systems that Intel will certify with the Intel® Server Board S3000PT. However, customers are responsible for their own certification from the individual operating system vendors. In many cases, customers may leverage their operating system certifications from Intel's testing. See the "Comments" section next to each operating system in the following table for additional information. Intel's certifications, pre-certification, and operating system testing may help reduce some of the risk in achieving customer certifications with the operating system vendors.

Operating System	Certification Listing	Comments
Microsoft Windows 2003* Enterprise Edition, EM64T	Intel® Server Board S3000PT	OEMs must request certification by Microsoft for their specific product. <a href="http://www.microsoft.com/whdc/hcl/default.msp">http://www.microsoft.com/whdc/hcl/default.msp</a> <a href="http://developer.intel.com/design/servers/whql.htm">http://developer.intel.com/design/servers/whql.htm</a>
Red Hat* Enterprise Linux Advanced Server Version 4, Update 3, EM64T	Intel® Server Board S3000PT	Red Hat checks Intel's results, certifies (if appropriate), and posts the certificate on its web site. Customers can leverage the Intel certification if their product meets the operating system vendor standard. <a href="https://hardware.redhat.com/hwcert/index.cgi">https://hardware.redhat.com/hwcert/index.cgi</a>

## 4. Peripherals

---

Peripheral compatibility and stress testing will only be performed with the latest version of an operating system at the time the validation testing occurred. The following table shows the operating system and base system configurations used to validate each device. All integrated on-board devices are tested by default and are, therefore, not included in the following tables.

The following notations are used in the tested peripherals table below to indicate the support level that Intel provides for a particular peripheral under a particular operating system.

Number (i.e., 1)	This peripheral has been tested and is supported under the specific configuration identified in the Base System Configuration table in Section 2 of this document.
Number in brackets (i.e., [1])	This peripheral has been tested, but is NOT supported under the specific configuration identified in the Base System Configuration table in Section 2 of this document.
NT	This peripheral has not been tested under this operating system and is not supported under this operating system.
ND	This peripheral has not been tested under this operating system due to limitations in IHV driver availability, and is not supported under this operating system.
IHVT (IHV Tested)	This peripheral has been tested according to Intel-approved guidelines and test procedures by the Independent Hardware Vendor (IHV) that manufactured this peripheral. Intel provides the same level of support for all the peripherals listed in this document, regardless of whether this peripheral was tested in an Intel lab or not. IHV test reports remain the property of the IHV (Intel cannot provide copies of these reports).

Manufacturer	Model Number	Model Name	Interface	Comments	Microsoft Windows 2003* Ent Ed, SP1 2003	Microsoft Windows 2003* Ent Ed, SP1 2003 EM64T	Red Hat* Enterprise Linux Adv Ser, V4, U3, EM64T	Red Hat* Enterprise Linux Adv Ser, V4, U4,		
<b>4.1 Input Devices</b>										
AOpen	O 35M	Mini Optical Mouse	PS2/USB	Mouse	1, 2, 3	1, 2, 3	1	2, 3		
Logitech	93114 5-403	Logitech Optical Mouse	PS2/USB	Mouse	1, 2, 3	1, 2, 3	1	2, 3		
Logitech	96741 5-0403	Logitech Media Keyboard	PS2/USB	Keyboard	1, 2, 3	1, 2, 3	1	2, 3		
Microsoft	B75-00092	Intellimouse Optical	PS2/USB	Mouse	1, 2, 3	1, 2, 3	1	2, 3		
<b>4.2 Modems</b>										
3COM	USR3 453B	V.Everthing 56K Analog Cor.Modem	Modem	Serial Modem	1, 2, 3	1, 2, 3	1	2, 3		
<b>4.3 CD/DVD-RW Drives</b>										
Addonics	AEPD VRW8 88UM	AEPDVRW8 88UM	USB2.0	CD-RW / DVD-ROM	2, 3	2, 3		2, 3		
Plextor	PX-740UF	PX-740UF	USB2.0	DVD-RW	1, 2, 3	1, 2, 3	1	2, 3		
Lite On	LSC-24082 KX	LSC-24082KX	USB2.0	DVD-RW	1	1	1			
Plextor	PX-755SA	PX-755SA	USB2.0	DVD-RW	2, 3	2, 3		2, 3		
TEAC	CDW - 552G	CDW-552G	USB 2.0	CD-RW	2, 3	2, 3		2, 3		
lomega	Super DVD Writer 16x16	Super DVD Writer 16x16	USB2.0	DVD±R/RW	2, 3	2, 3		2, 3		

Manufacturer	Model Number	Model Name	Interface	Comments	Microsoft Windows 2003* Ent Ed, SP1 2003	Microsoft Windows 2003* Ent Ed, SP1 2003 EM64T	Red Hat* Enterprise Linux Adv Ser, V4, U3, EM64T	Red Hat* Enterprise Linux Adv Ser, V4, U4,		
Sony	DRX-720UL	DRX-720UL	USB2.0	DVD-RW	1, 2, 3	1, 2, 3	1	2, 3		
<b>4.4 Removable Drives</b>										
SanDisk	SDCZ 2-4096	Cruzer Mini USB Flash	USB key	SanDisk	1, 2, 3	1, 2, 3	1	2, 3		
Lexar	JD1GB B-80-231	1GB USB Flash Drive	USB key	Lexar	1	1	1			
Crucial	CT1GB BUFD	Gizmo! 1GB	USB key	Crucial	2, 3	2, 3		2, 3		
Mitsumi	D353 FUE	D353FUE	USB Floppy	Mitsumi	1, 2, 3	1, 2, 3	1	2, 3		
Sony	PCGA - UFD5	VAIO External USB floppy	USB Floppy	Sony	1, 2, 3	1, 2, 3	1	2, 3		
<b>4.5 PCIe NIC adapter</b>										
Intel	EXPI9 300PT	Intel® PRO/1000 PT Desktop Adapter	PCI Express		1, 2, 3	1, 2, 3	1	2, 3		
Intel	EXPI9 400PT	Intel® PRO/1000 PT Server Adapter	PCI Express		1, 2, 3	1, 2, 3	1	2, 3		
Intel	EXPI9 402PT	Intel® PRO/1000 PT Dual Port Server Adapter	PCI Express		1, 2, 3	1, 2, 3	1	2, 3		
Syskonnect	SK-9E21D	SK-9E21D	PCI Express		1, 2, 3	1, 2, 3	1	2, 3		
Syskonnect	SK-9E22	SK-9E22	PCI Express		1, 2, 3	1, 2, 3	1	2, 3		

Manufacturer	Model Number	Model Name	Interface	Comments	Microsoft Windows 2003* Ent Ed, SP1 2003	Microsoft Windows 2003* Ent Ed, SP1 2003 EM64T	Red Hat* Enterprise Linux Adv Ser, V4, U3, EM64T	Red Hat* Enterprise Linux Adv Ser, V4, U4,			
<b>4.6 Infiniband Adapter</b>											
Mellanox	MHES 14-X	MHES14-X	PCI Express	OFED	1	1, 3	1				
Mellanox	MHES 18-X	MHES18-X	PCI Express	OFED	1	1, 3	1				
Mellanox	MHG S18-X	MHGS18-X	PCI Express	OFED	1	1, 3	1				
Silverstorm	7104-HCA-LPX1 P	MHES18X	PCI Express		1	1	1				
Silverstorm	7104-HCA-LPX1 P-DDR	MHGS18X	PCI Express		1	1	1				
<b>4.7 SAS/SATA Adapter</b>											
Promise	Super Trak EX8350	SuperTrak EX8350	PCI Express	SATA adapter	2, 3	2, 3		3			
Intel	SRCS AS18 E	SRCSAS18E	PCI Express	SAS adapter	1, 2, 3	1, 2, 3	1	2, 3			
Intel	SRCS AS14 4E	SRCSAS144 E	PCI Express	SAS adapter	1, 2, 3	1, 2, 3	1	2, 3			
LSI Logic	Mega RAID SAS 8308E LP	MegaRAID SAS 8308ELP	PCI Express	SAS adapter	2, 3	2, 3		2, 3			
Adaptec	ASR-4805S AS	ASR-4805SAS	PCI Express	SAS adapter	2, 3	2, 3		2, 3			

Manufacturer	Model Number	Model Name	Interface	Comments	Microsoft Windows 2003* Ent Ed, SP1 2003	Microsoft Windows 2003* Ent Ed, SP1 2003 EM64T	Red Hat* Enterprise Linux Adv Ser, V4, U3, EM64T	Red Hat* Enterprise Linux Adv Ser, V4, U4,		
<b>4.8 Video Adapter</b>										
Matrox	G55-MDD E32L PD	Millennium G550	PCI express		2, 3	2, 3		2, 3		

## 5. Hard Disk Drives

The hard drives listed in the following table have been tested with the Intel® Server Board S3000PT by Intel in its validation labs and/or by individual drive vendors. The following operating system identifiers are used in the table to specify which operating system each drive was tested under.

Identifier number	Operating System
1	Microsoft Windows 2003* Server Enterprise Edition, SP1
2	Microsoft Windows 2003* Server Enterprise Edition, SP1, EM64T
3	Red Hat* Enterprise Linux Advanced Server, Version 4, Update 3 EM64T
4	Red Hat* Enterprise Linux Advanced Server, Version 4, Update 4 EM64T

Note that not all hard drives were tested under all operating systems. The following notation is used in the following tested hard drives table to indicate the support level that Intel provides for a particular hard drive with a particular operating system.

Number (i.e., 1)	This hard drive has been tested and is supported under the operating system identified by the operating system identification number.
Number in brackets (i.e., [1])	This hard drive has been tested, but is NOT supported under the operating system identified by the operating system identification number.
SD (Similar Drive)	The hard disk drive is supported, but not tested. This hard drive model/capacity has not been tested with this server board, but Intel will support it based on successful testing of a larger capacity hard drive from the same hard drive family. Intel has high confidence that this hard drive will function correctly with the server board. This drive uses the exact same firmware and drivers as a larger capacity hard drive that has been successfully tested with this server board. The only difference between this drive and the one that was used in testing is the storage capacity. Intel provides the same level of support for all hard drives listed in this document, regardless of whether the drive was tested or not. Customers should always test hard drives as part of the final system configuration prior to deployment. Given the fact that a larger capacity hard drive from the same drive family has successfully completed testing on this server board, this particular hard drive capacity point will not be tested.
IHVT (IHV Tested)	The hard disk drive has been tested according to Intel-approved guidelines and test procedures by the Independent Hardware Vendor (IHV) that manufactured the drive. Intel provides the same level of support for all hard drives listed in this document, regardless of whether the drive was tested in an Intel lab or not. IHV test reports remain the property of the IHV (Intel cannot provide copies of these reports).



Manufacturer	Model Number	Product Family	Interface	RPM	Drive size (GB)	Tested Operating Systems	Notes
<b>SAS Hard Drives</b>							
Hitachi	HUS151436VLS300	Ultrastar 15K147 (RoHS)	SAS-300	15K	36	1, 2, 3, 4	
Fujitsu	MAX3036RC	AL9LX (RoHS)	SAS-300	15K	36	1, 2, 3, 4	
Seagate	ST936701SS	Savio 10K.1	SAS-300	10K	36	1, 2, 3, 4	
Maxtor	7V300S0	Maxline III (RoHS)	SAS-300	7200	300	1, 2, 3, 4	
Seagate	ST3400823NS	NL35	SAS-300	7200	250	1, 2, 3	
<b>SATA Hard Drives</b>							
Western Digital	WD740GD	WD Raptor	SATA-150	10K	74	1, 2, 3	
Western Digital	WD360ADFD	WD Raptor EL150	SATA-150	10K	36	1,2, 4	
Western Digital	WD1200BEAS	WD Scorpio	SATA-150	5400	120	1,2, 4	
Hitachi	HDS725050KLA360	Deskstar 7K500 (RoHS)	SATA-300	7200	500	1, 2, 3, 4	
Seagate	ST3500630NS	Barracuda ES	SATA-300	7200	500	1, 2, 4	
Seagate	ST910021AS	Momentus 7200.1	SATA-150	7200	100	1, 2, 4	
<b>USB Hard Drives</b>							
Maxtor	E01G300	Maxtor One Touch II	USB hard drive			1, 2, 4	